

**AMENDMENTS TO THE CLAIMS:**

This listing of claims will replace all prior versions and listings of claims in the application:

1. (Currently Amended) A permselective asymmetric hollow fiber membrane being suitable for, ~~for example, hemodialysis, comprised~~ comprising of at least one hydrophobic polymer and at least one hydrophilic polymer, ~~characterized in that wherein~~ an outer surface of the hollow fiber membrane has pores having sizes in the range of ~~0.5~~ 0.5-3  $\mu\text{m}$ , ~~and that the numbers density of said pores on the outer surface being are~~ in the range of 10,000 to 150,000 pores per  $\text{mm}^2$ , ~~preferably in the range of 18,000 to 100,000 pores per  $\text{mm}^2$ , most preferably in the range of 20,000 to 100,000 pores per  $\text{mm}^2$ .~~

2. (Currently Amended) A membrane according to claim 1, wherein said membrane has a four layer structure comprising a first inner separation layer in the form of a dense rather thin layer, a second layer in the form of a sponge structure, a third layer in the form of a finger structure, and a fourth outer layer in the form of a sponge layer having the an outer surface having pores with sizes in the range of 0.5-3  $\mu\text{m}$ , the number of said pores on the outer surface of the sponge layer being in the range of 10,000 to 150,000 pores per  $\text{mm}^2$  according to claim 1.

3. (Original) A membrane according to claim 2, wherein said membrane has a diffusive permeability of urea of  $15\text{-}17 \times 10^{-4}$  cm/sec measured at  $37^\circ\text{C}$ .

4. (Currently Amended) A membrane according to claim 2 or claim 3, wherein said first separation layer has a thickness less than  $1 \mu\text{m}$ , said second layer

has a thickness of about 1 to 15  $\mu\text{m}$ , said third layer has a thickness of about 20 to 60  $\mu\text{m}$ , and said fourth outer layer has a thickness of about 1 to 10  $\mu\text{m}$ .

5. (Currently Amended) A membrane according to claim 1 ~~anyone of claims 1-4, wherein it consists of~~ wherein said membrane is 65-95% by weight of said at least one hydrophobic polymer and 5-35% by weight of said at least one hydrophilic polymer.

6. (Currently Amended) A membrane according to claim 1 ~~anyone of claims 1-5, wherein~~ said at least one hydrophobic polymer is chosen from ~~the~~ a group of polymers consisting of polyamide (PA), polyaramide (PAA), polyarylethersulphone (PAES), polyethersulphone (PES), polysulphone (PSU), polyarylsulphone (PASU), polycarbonate (PC), polyether, polyurethane (PUR), polyetherimide, and copolymers of said polymers, ~~preferably polyethersulphone or a mix of polyarylethersulphone and polyamide.~~

7. (Currently Amended) A membrane according to one of claims 1 or 6 ~~anyone of the claims 1-6, wherein~~ the at least one hydrophilic polymer is chosen from the group consisting of polyvinylpyrrolidone (PVP), polyethylene glycol (PEG), polyglycolmonoester, water soluble cellulosic derivates, polysorbate, and polyethylene-polypropylene oxide copolymers, ~~preferably polyvinylpyrrolidone.~~

8. (Currently Amended) A process ~~Process the preparation of for preparing~~ a membrane according to ~~anyone of claims 1-7~~ claim 1 by solvent phase inversion spinning, comprising the steps of:

a) dissolving said at least one hydrophobic polymer and said at least one hydrophilic polymer ~~are dissolved~~ in at least one solvent to form a polymer solution,

b) extruding said formed polymer solution ~~is extruded~~ through an outer ring slit of a nozzle with two concentric openings,

c) extruding a center fluid ~~is extruded~~ through the inner opening of the nozzle, and thereafter

d) washing said membrane, wherein ~~is washed and preferably dried,~~ characterized in that the polymer solution coming out through the outer slit opening is, on the outside of the precipitating fiber, exposed to a humid steam/air mixture comprising a solvent in a content of between 0,5 0.5 and 10% by weight related to the water content.

9. (Currently Amended) A process ~~Process~~ according to claim 8, wherein the solvent content within the humid steam/air mixture is between 0,5 0.5 and 5% by weight related to the water content.

10. (Currently Amended) A process ~~Process~~ according to claim 8, wherein the solvent content within the humid steam/air mixture is between 2 and 3% by weight related to the water content.

11. (Currently Amended) A process ~~Process~~ according to claim ~~anyone of~~ claims 8 to 10, wherein the temperature of the humid steam/air mixture is at least 15°C, preferably at least 30°C, and at most not more than 75°C, ~~preferably at most 60°C.~~

12. (Currently Amended) A process ~~Process~~ according to claim ~~anyone of~~ claims 8 to 11, wherein the relative humidity in the humid steam/air mixture is between 60 and 100%.

13. (Currently Amended) A process ~~Process~~ according to claim 8 ~~any of~~ claims 8 to 12, wherein the polymer solution consists of 10-20% by weight of the at least

one hydrophobic polymer, 3-11% by weight of the at least one hydrophilic polymer, 66-86 % by weight solvent<sub>1</sub> and 1-5 % by weight suitable additives.

14. (Currently Amended) A process ~~Process~~ according to claim 8 ~~anyone of claims 8-13~~, wherein the polymer solution ~~emprise~~ comprises 1-5% by weight coagulation fluid chosen from the group of water, glycerol, and ~~or~~ other alcohols.

15. (Currently Amended) A process ~~Process~~ according to claim 8 ~~anyone of claims 8-14~~, wherein said solvent is chosen from the group comprising n-methylpyrrolidon (NMP), dimethylacetamide (DMAC), dimethylsulphoxide (DMSO), dimethylformamide (DMF), butyrolactone<sub>1</sub> and mixtures of said solvents.

16. (Currently Amended) A process ~~Process~~ according to claim 8 ~~anyone of claims 8-15~~, wherein said center fluid includes a part of said at least one hydrophilic polymer.

17. (Currently Amended) A process ~~Process~~ according to claim 8 ~~anyone of claims 8-16~~, wherein said center fluid includes at least one solvent chosen from the group comprising n-methylpyrrolidon (NMP), dimethylacetamide (DMAC), dimethylsulphoxide (DMSO), dimethylformamide (DMF), butyrolactone<sub>1</sub> and mixtures of said solvents.

18. (Currently Amended) A process ~~Process~~ according to claim 8 ~~anyone of claims 8-17~~, wherein said center fluid includes precipitation medium chosen form the group water, glycerol<sub>1</sub> and other alcohols.

19. (Currently Amended) A process ~~Process~~ according to claim 8 ~~anyone of claims 8-18~~, wherein said center fluid consist of 45-70% by weight precipitation medium, 30-55% by weight solvent<sub>1</sub> and 0-5% by weight said at least one hydrophilic polymer.

20. (Currently Amended) ~~Use of a~~ A membrane according to claim 1 ~~anyone~~  
~~of claims 1-7 in hemodialysis, configured for~~ hemodiafiltration~~[[,]]~~ and hemofiltration.

21. (Currently Amended) ~~Use of a~~ A membrane according to claim 1 ~~anyone~~  
~~of claims 1-7 configured for~~ in dialysis and filtration.

22. (Currently Amended) ~~Use of a~~ A membrane manufactured according to  
~~any of claims 8-19 in hemodialysis, the process of claim 8, said membrane being~~  
configured for hemodiafiltration~~[[,]]~~ and hemofiltration.

23. (Currently Amended) ~~Use of a~~ A membrane manufactured according to  
~~any of claims 8-19 the process of claim 8, said membrane configured for~~ in dialysis and  
filtration.

24. (New) A membrane according to claim 1, wherein the density of pores on  
the outer surface are in the range of 18,000 to 100,000 pores per mm<sup>2</sup>.

25. (New) A membrane according to claim 1, wherein the density of pores on  
the outer surface are in the range of 20,000 to 100,000 pores per mm<sup>2</sup>.

26. (New) A process according to claim 8, wherein the membrane is dried  
following the washing step.

27. (New) A process according to claim 8, wherein the temperature of the  
humid steam/air mixture is at least 30°C and not greater than 60°C.